

ORAL ARGUMENT NOT YET SCHEDULED

No. 24-1120

(consolidated with Nos. 24-1121, 24-1122, 24-1124, 24-1126, 24-1128, 24-1142,
24-1143, 24-1144, 24-1146, 24-1152, 24-1153, 24-1155, 24-1222, 24-1226, 24-
1227, 24-1233)

IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

STATE OF WEST VIRGINIA, *et al.*
Petitioners,

v.

ENVIRONMENTAL PROTECTION AGENCY,
Respondent,

ON PETITIONS FOR REVIEW OF ORDERS OF THE
ENVIRONMENTAL PROTECTION AGENCY

**BRIEF SUPPORTING PETITIONERS ON BEHALF OF INTERVENORS,
THE LOUISIANA PUBLIC SERVICE COMMISSION AND
THE TENNESSEE VALLEY PUBLIC POWER ASSOCIATION, INC.**

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CERTIFICATE AS TO PARTIES, RULINGS, AND RELATED CASES

(A) Parties and Amici. The Louisiana Public Service Commission (“LPSC”) and Tennessee Valley Public Power Association, Inc. (“TVPPA”) each submitted comments in opposition of the Final Rule in the underlying Environmental Protection Agency (“EPA”) rulemaking docket (EPA-HQ-OAR-2023-0072). CI0736 (LPSC Comment), CI0792 (TVPPA Comment). All parties, intervenors, and amici appearing in this Court are listed in the Briefs for Petitioners.

(B) Rulings Under Review. References to the rulings at issue appear in the Briefs for Petitioners.

(C) Related Cases. To the best of counsels’ knowledge, all cases challenging the EPA Final Rule *New Source Performance Standards for Greenhouse Gas Emissions From New, Modified, and Reconstructed Fossil Fuel-Fired Electric Generating Units; Emission Guidelines for Greenhouse Gas Emissions From Existing Fossil Fuel-Fired Electric Generating Units; and Repeal of the Affordable Clean Energy Rule*, 89 Fed. Reg. 39,798 (May 9, 2024) have been consolidated in this proceeding.

RULE 26.1 CORPORATE DISCLOSURE STATEMENT

The Louisiana Public Service Commission is a political subdivision of the State of Louisiana. No corporate disclosure is required.

Tennessee Valley Public Power Association, Inc. is a non-profit mutual benefit corporation organized under the laws of the State of Tennessee, whose membership consists of the 153 municipal and rural electric cooperative electric utilities who are parties to requirements power sales agreements with the Tennessee Valley Authority under Section 10 of the Tennessee Valley Authority Act (16 U.S.C. §§ 831-831ee, § 831i). TVPPA has no outstanding shares of stock and is governed by a nineteen-member Board of Directors elected by its member utilities. TVPPA is a “trade association” within the meaning of Cir. R. 26.1(b).

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GLOSSARY

Act	Clean Air Act
ADIT	Accumulated Deferred Income Tax
BSER	Best System of Emissions Reduction
Capacity factor or load factor	Measure of the use of a generator in serving load
CCS	Carbon Capture and Sequestration
CO ₂	Carbon Dioxide
EPA	Environmental Protection Agency
FEED	Front End Engineering and Design
FERC	Federal Energy Regulatory Commission
IPM	Integrated Planning Model
JA	Joint Appendix
LOLE	Loss of Load Event
LPSC	Louisiana Public Service Commission
MISO	Midcontinent Independent System Operator
MW	Megawatt – a measure of capability to meet load
MWh	Megawatt Hour – a measure of energy production
NERC	North American Electric Reliability Corporation
NOL	Net Operating Loss
NRECA	National Rural Electric Cooperative Association
PJM	Pennsylvania-New Jersey-Maryland Interconnection
PRM	Planning Reserve Margin
RIA	Regulatory Impact Analysis
RTO	Regional Transmission Organization
SPP	Southwest Power Pool
TVA	Tennessee Valley Authority
TVPPA	Tennessee Valley Public Power Association, Inc.

STATEMENT OF THE ISSUES

Intervenors Supporting Petitioners adopt Petitioners' Statement of the Issues, with one additional issue:

Is the EPA Rule arbitrary for requiring baseload natural gas power plants, the most efficient fossil-fired resource, to comply with carbon capture, transport and sequestration requirements ("CCS") while exempting low and intermediate load gas generators, even though emissions are lowest from baseload generators?

STATUTES AND REGULATIONS

All applicable statutes are contained in the Addendum to the Brief for Petitioners.

STATEMENT OF THE CASE

Intervenors Supporting Petitioners adopt the Statement of the Case set forth in Petitioners' Initial Brief.

SUMMARY OF THE ARGUMENT

1. ***The EPA's Requirement That CCS Be Implemented For Efficient Baseload Natural Gas Generators, While Exempting Lower-Output Generators, is Nonsensical.*** The EPA's Final Rule ("Rule") is arbitrary in its treatment of coal generation, but nonsensical in its treatment of highly efficient baseload natural gas generators. EPA mandates that highly efficient gas generators

comply with CCS, which will triple the per-megawatt-hour (“MWh”) cost of that generation and make it imprudent to construct and operate. In contrast, it exempts lower output gas generators from the CCS requirement, even though they emit much more carbon dioxide (“CO₂”). EPA finds that baseload combined cycle generators are more efficient, lower-emitting, less costly, and heavily relied on to support the grid, but makes them economically impractical.

2. ***The EPA Fails To Reasonably Address the Cost of Implementing the Rule.*** The Rule is arbitrary for failing to consider important variables in the cost estimates it relies on, offering explanations that are inconsistent with the evidence, and relying on internally inconsistent reasoning.

To implement CCS under Section 111 of the Clean Air Act (“Act”), EPA is required to show that its plan is the best system of emission reduction (“BSER”), while considering factors such as cost. For the cost factor, the Rule relies heavily on speculative tax credits that it claims will partially offset the cost of implementing CCS. But EPA does not address the cost under realistic conditions – generation at historic capacity factors (also, “load factors”) and the likelihood of realizing the tax credits. EPA did not adequately consider the exorbitant cost of implementing CCS without EPA’s assumption that baseload units will receive tax credits by achieving capacity factors far above historic levels.

The Rule is also arbitrary because its conclusion rests on the unreasonable assertion that the “cost” factor should only consider the cost “to the regulated source”—here the utility implementing CCS—thereby ignoring costs that may be transferred to others. That argument is inconsistent with precedent that explains “costs” should be analyzed broadly. Even if the tax credits relied upon by EPA are realized, the cost of implementing CCS would be borne by taxpayers.

The EPA does not have the expertise to draw reasonable conclusions regarding electric utility reliability and ratemaking. Its conclusions proffered in support of the Rule are erroneous. The Federal Energy Regulatory Commission (“FERC”), on the other hand, possesses that expertise. At least one current FERC Commissioner has opined that the consequences of implementing the Rule would be catastrophic. Basic utility ratemaking principles further establish the arbitrariness of the EPA’s conclusions.

The Rule is also arbitrary for being internally inconsistent. For example, the Rule rejects a “partial-CCS” option because sufficient tax credits “may” not be available for that option. But the same is true for the 90 percent CCS system that the Rule approves. Recent experience of one Louisiana-regulated utility proves that reliance on tax credits to pay for CCS is unreasonable.

3. ***The Final Rule Jeopardizes the Reliability of the Electric Grid.***

The Rule undermines the reliability of the electric grid by forcing the early

retirement of coal plants and limiting and increasing the costs of generation of electricity from baseload gas plants, and limiting the availability of generation able to vary output quickly in response to the variable and intermittent availability of non-carbon wind and solar resources. By forcing the industry to rush through efforts to implement a carbon capture and sequestration technology that remains both technically and economically unproven, EPA threatens grid reliability.

Many of the Regional Transmission Organizations (“RTOs”) raised concerns regarding reliability in their comments on the Proposed Rule, but EPA has ignored those reliability concerns. Notably, the agency’s deterministic Integrated Planning Model (“IPM”) fails to adequately account for factors likely to affect grid reliability. Furthermore, the Rule fails to explain how increasing demand will be met notwithstanding EPA’s own estimates of the substantial baseload generation units that will retire as a result of the Rule, rather than comply with its strictures. EPA’s flawed, half-hearted reliability analysis renders the Rule arbitrary and capricious.

4. ***The Rule Intrudes Upon Traditional States’ Rights to Determine Generation Mix.*** The United States Supreme Court and FERC have both recognized the traditional authority of States to regulate the choice of generation and resource mix within their jurisdictions. The Rule, however, imposes exorbitant costs on electric utilities and their customers that will cause existing coal generators to

retire and precludes the construction of efficient natural gas resources to balance the intermittency of renewable generating resources. The Rule's attempt to dictate the fuel source within the purview of State jurisdiction should be rejected.

STANDING

Each of TVPPA's 104 municipal electric utility members and 49 rural electric cooperative members will suffer imminent injury as a result of EPA's Rule from higher costs and reduced reliability of wholesale electric power supplied by TVA. That injury is directly and proximately caused by implementation of EPA's Rule. In its representative capacity, TVPPA has associational standing to represent the interests of its members in these consolidated proceedings. *See TVA v. EPA*, 278 F.3d 1184, 1208-1209 (11th Cir. 2002); *Cent. Ariz. Water Conservation Dist. v. EPA*, 990 F.2d 1531, 1537-1539 (9th Cir. 1993).

The LPSC is a state agency with authority to regulate the rates and service of electric utilities operating within the State of Louisiana. La. Const. art. IV, § 21. The LPSC has standing because it represents the interests of Louisiana retail electricity consumers that would be subject to the costs imposed by EPA's Rule. 16 U.S.C. § 825l(b).

STANDARD OF REVIEW

A decision of an agency is "unlawful" if it is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law." 5 U.S.C.

§ 706(2)(A). Agency action is arbitrary and capricious if it is not “reasonable and reasonably explained.” *FCC v. Prometheus Radio Project*, 592 U.S. 414, 423 (2021). While a reviewing court “may not ‘substitute its judgment for that of the agency,’” the court “must ensure that the agency has offered ‘a satisfactory explanation for its action[,] including a rational connection between the facts found and the choice made.’” *Ohio v. EPA*, 144 S. Ct. 2040, 2053 (2024) (internal citations omitted). As the Supreme Court has held, “Normally, an agency rule would be arbitrary and capricious if the agency . . . entirely failed to consider an important aspect of the problem [or] offered an explanation for its decision that runs counter to the evidence before the agency.” *Motor Vehicle Mfrs, Ass’n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983). An agency “must account for evidence in the record that may dispute the agency’s findings.” *Port of Seattle v. FERC*, 499 F.3d 1016, 1035 (9th Cir. 2007).

“EPA’s actions must also be consistent; an internally inconsistent analysis is arbitrary and capricious.” *Nat’l Parks Conservation Ass’n v. EPA*, 788 F.3d 1134, 1141 (9th Cir. 2015); *Gen. Chem. Corp. v. U.S.*, 817 F.2d 844, 857 (D.C. Cir. 1987) (“Because the ICC’s analysis . . . is internally inconsistent and inadequately explained, we find its ultimate conclusion . . . to be arbitrary and capricious . . .”).

ARGUMENT

I. THE RULE FINDS THAT COMBINED CYCLE BASE LOAD GAS GENERATION IS THE LEAST-EMITTING, MOST EFFICIENT, MOST ECONOMICAL FOSSIL GENERATION, BUT EFFECTIVELY PROHIBITS ITS USE.

The Rule exempts lower-efficiency gas generators from compliance with CCS. For higher efficiency combined cycle units, EPA requires CCS. EPA finds that the higher load factor gas units are most efficient, emit the lowest amounts of CO₂ among fossil alternatives, and are being added to support the grid at the highest rate. CI0001, 89 Fed. Reg. at 39,909-10, 39,816, 39,932, JA____, ____, _____. EPA uses output as the determinants for low, intermediate and baseload gas generation because an alternative “would reduce the regulatory incentive for manufacturers to invest in programs to develop higher efficiency combustion turbines.” *Id.* at 39,910, JA____. But the Rule adopts the CCS requirement only for these highly desirable units, almost tripling their costs and making it economically imprudent to run them at normal levels, while exempting the less-desirable gas generators.

EPA finds that “coal-fired generation declined by 59 percent while natural gas-fired generation increased by 88 percent between 2007-22.” *Id.* at 39,816, JA____. EPA projects that 34,000 megawatts (“MW”) of new gas-fired generation will come online by 2035, most of it combined-cycle capacity. *Id.* at

39,823, JA____. Assuming 700 MW units, that is about 49 new units, all of which are needed to support the grid.

The Rule determines that high capacity factor units “operate more often [than other gas units] at higher hourly capacities, where CO₂ emission rates are lower.” *Id.* at 39,896, JA____. EPA finds that for gas generators, emissions increase at significant levels at capacity factors below 40 percent. *Id.* at 39,911, JA____. Yet it imposes CCS on those combined cycle units that operate at above 40 percent capacity factors and exempts the less efficient units. *Id.* EPA states that “[t]he greater the output of electric energy for a given amount of fuel energy input, the higher the efficiency of the electric generation process,” allowing more productive use of fuel. *Id.* at 39,909, JA____. EPA adopts a highly efficient technology standard for all natural gas units, but imposes huge costs only on those operating at the most efficient levels.

The Rule states that the first component of its requirements – “highly efficient generation” – will reduce annual CO₂ emissions by 313,000 tons and NO_x emissions by 23 tons. *Id.* at 39,923, JA____. Yet it effectively requires all gas generators to run at inefficient levels – 40 percent capacity or less. The Rule requires the addition of CCS on units operating at higher levels, which makes that option risky and unduly expensive.

EPA failed to consider the impact of its Rule on electric generation, especially in the regulatory context. First, electric generators are “dispatched” – required to send electricity to the grid – on an *economic* basis. The incremental costs are stacked from low to high, with the lowest-cost energy dispatched first and the highest cost dispatched last. Second, regulated utilities are held to a standard of prudence, which is primarily driven by cost comparisons. A utility would be imprudent to choose a resource with higher costs than the alternative, absent unusual factors.

EPA’s own cost estimates show that its Rule makes the baseload units, the most efficient producers of energy, the least economic. EPA estimates that the costs of adding carbon capture equipment, based on a rosy capacity factor assumption of 65 percent over 30 years, are \$27 per MWh. *Id.* at 38,932, JA _____. The \$27 per MWh is about the trading price for electric energy in the MISO regional area.

EPA finds that the capital cost of a new unit more than doubles from CCS, operating costs increase by 35 percent, and efficiency is reduced by 13 percent. *Id.* The CCS equipment costs would approach \$1.1 billion per unit. As EPA states, “[t]hese costs do not include CO₂ transport, storage, or monitoring costs.” *Id.* at 39,932 n.803, JA _____. For a 700 MW unit, EPA predicts that those costs will add \$19/MWh. *Id.* at 39,934-935, JA _____ - _____. The total cost per MWh of the

least-emitting, most efficient generators will approximately triple. And since the cost of transporting and sequestering CO₂ in facilities owned by others are incremental, baseload units probably will dispatch *after* intermediate and low load units. EPA does not address this issue.

EPA requires “[h]ighly efficient” generation technology for low-load or intermediate gas resources and “highly efficient” combined cycle designs for baseload units. *Id.* at 39,922, JA _____. Yet to avoid CCS, all units have to operate at inefficient levels. EPA penalizes the most efficient units by imposing exorbitant costs on them and causing a 13 percent decrease in efficiency, with higher emissions. *Id.* at 39,922, JA _____. (13 percent heat rate increase). EPA does not explain this inconsistency.

EPA creates a no-go zone for gas-fired generators, above 40 percent capacity factor. But above 40 percent capacity factor is the normal operating range for baseload gas generators. *Id.* at 39,934, JA _____ (historic average 51 percent). If a generator operates above that level, it incurs the enormous costs of CCS. Only if it operates at 80 percent capacity factor or more can the utility hope to even obtain sufficient tax credits to defray the cost of CCS equipment, according to EPA’s estimates. They will not offset other costs. [*See* Sec. II(A) below].

There are only two choices for utilities: 1) run baseload units at inefficient, higher-emitting capacity factors; or 2) rely on low or intermediate load

generators, which are less efficient and emit higher levels of pollutants. Either would be more economic and less risky than adding CCS, which may not even be feasible. EPA's CCS requirement for baseload gas generators conflicts with its lower-emission goal and its own factual findings that extoll more-efficient generation.

II. THE RULE IS ARBITRARY FOR FAILING TO PROPERLY CONSIDER THE EXORBITANT COSTS THAT WILL RESULT FROM ITS IMPLEMENTATION.

In the Rule, EPA gives itself unprecedented power to regulate electric generating units and to impose massive cost increases on electric energy consumers. The cost of implementing the regulations for long-term existing coal units alone is conservatively estimated to exceed \$30 billion. That amount grows tremendously when the cost of other generating units, including new and existing natural gas units, are added. Those excessive costs will either be transferred to taxpayers through electric utilities' utilization of tax credits, or the utilities will seek to recover the costs from their ratepayers. Congress did not provide the EPA with such broad authority to impose upon ratepayers the staggering cost of implementing the greenhouse gas mitigation program included in the Rule.

The EPA claims to possess the authority to implement its Rule based on powers conferred upon it in Section 111 of the Clean Air Act. CI0001, 89 Fed. Reg. 39,824, JA____. For the "regulation of emissions from new sources," the Act requires EPA to establish a "standard of performance" for new sources that

determines the best system of emissions reduction. *Id.* The Rule explains that “[t]o determine the BSER, the EPA first identifies the ‘system[s] of emission reduction’ that are ‘adequately demonstrated,’ and then determines the ‘best’ of those systems, ‘taking into account’ factors **including ‘cost,’** ‘nonair quality health and environmental impact,’ and ‘energy requirements.’” *Id.* (emphasis added) (quoting *W. Va. v. EPA*, 597 U.S. 697, 709 (2022)); 42 U.S.C. § 7411(a). Based on the system chosen as the BSER, the EPA derives an “achievable” “degree of emission limitation” that regulated entities must satisfy. CI0001, 89 Fed. Reg. at 39,824, JA____.

In addition to regulating new generators, the Rule relies on purported authority conferred by Section 111(d) to regulate “emissions from existing sources.” *Id.* That section does not authorize EPA to directly regulate the emissions from existing sources. To the contrary, Section 111(d) only grants EPA the authority to require **States** to enact plans to satisfy the emission limits established by the agency. Those emission limits are derived from the “standard of performance” for “new sources” and are based on the BSER. 42 U.S.C. § 7411(d). Once the state receives EPA approval of its plan, that plan then becomes federally enforceable. If a state fails to submit a satisfactory plan, EPA will “promulgate a plan that establishes Federal standards of performance.” CI0001, 89 Fed. Reg. at 39,824, JA____.

The BSER approved by the Rule requires existing coal plants slated to operate beyond 2040 to install and operate CCS that will capture 90 percent CO₂ capture by 2032. CI0001, 89 Fed. Reg. at 39,801, JA____. For coal plants retiring by January 1, 2039, the Rule establishes that the BSER is co-firing natural gas at 40 percent of annual input with a 16 percent reduction in emissions. *Id.* For new baseload natural gas units, the Rule requires CCS with a 90 percent capture rate, beginning in 2032. *Id.* at 39,938; JA____.

The costs of implementing EPA's CCS requirement are exorbitant. To invoke these regulations, EPA must show that the cost is reasonable. "An adequately demonstrated system is one which has been shown to be reasonably reliable, reasonably efficient, and which can reasonably be expected to serve the interests of pollution control **without becoming exorbitantly costly in an economic or environmental way.**" *Essex Chemical Corp. v. Ruckelshaus*, 486 F.2d 427, 433 (D.C. Cir. 1973) (emphasis added). The Rule fails that test.

A. The Rule is Arbitrary For Failing to Address the True Cost of Implementing the CCS System for Baseload Combined Cycle Units.

The Rule justifies the increased costs that result from implementing CCS by offsetting those exorbitant costs with tax credits that it *assumes* will be available to utilities, *if* the utilities implementing the CCS equipment achieve the elevated capacity factors assumed in its analysis. *E.g.*, CI0001, 89 Fed. Reg. at

39,881, JA____. For instance, EPA assumes an 80 percent capacity factor for gas baseload units for the 12-year period in which tax credits will be available, compared to the historical average of 51 percent. *Id.* at 39,934, JA____. EPA assumes a capacity factor of 31 percent thereafter, to get back to the historical average. *Id.* It notes that the generator would not be subject to CCS at that output level, small comfort when all the fixed costs have already been incurred. *Id.*

EPA classifies any unit that operates at more than 40 percent as baseload, capturing many units designed to follow load. Load varies dramatically from the peak, making the 80 percent assumption unrealistic for those units. The Rule fails to address the cost of implementing CCS in the likely event that some or all of the tax credits are not realized. The Rule is arbitrary for “entirely fail[ing] to consider an important aspect of the problem.” *Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983); *see also* CI0736 at 24-26 (LPSC comments criticizing reliance on tax credits); CI0792 at 14, 20-21 (TVPPA comments criticizing reliance on tax credits).

A spreadsheet entitled “Coal CCS Cost Calculations” in the underlying agency docket shows the calculations relied upon by EPA to assess the cost of implementing CCS for existing long-term coal units. CI9095 (*Coal CCS Cost Calculations*) (Excel spreadsheet version available at <https://www.regulations.gov/document/EPA-HQ-OAR-2023-0072-9095>). That spreadsheet shows that the cost

to implement CCS *without considering tax credits* is approximately \$32 billion, assuming an 80 percent capacity factor and, again, a 12-year capital amortization period for coal units that operate after January 1, 2039. *Id.* (changing amounts in column CC “Total 45(q) Costs (\$)” to \$0 for each unit).

Rather than evaluating the reasonableness of the \$32 billion cost, EPA assumes a \$33 billion tax credit offset. *See id.* (total of 45(q) tax credits in column “CC” for coal-fired steam generating units that are expected to operate after January 1, 2039). Without a supporting basis, the Rule assumes those credits will be realized. CI0001, 89 Fed. Reg. at 39,879, JA____. But when the tax credits are removed from EPA’s calculation, the additional cost per MWh of generation increases from -\$4/MWh to \$84/MWh.

When the assumed capacity factor in the calculation is changed, the average cost per MWh varies drastically. Reducing the 80 percent capacity factor assumption to 70 percent increases the cost of implementing CCS to \$91/MWh without tax credits and would reduce the credits. *Coal CCS Cost Calculations*, <https://www.regulations.gov/document/EPA-HQ-OAR-2023-0072-9095>. The average increases to over \$100/MWh if the capacity factor is adjusted to 60 percent with further-reduced credits. *Id.* The Rule never addresses these issues or discloses the potentially devastating costs that will result if its tax credit assumption is not realized.

As discussed, the Rule almost triples the cost of running baseload gas units. EPA assumes the cost will be *partially* offset by tax credits received for capturing carbon at 80 percent or higher capacity factors, 30 percent above historical levels. *Id.* at 39,934, JA____. EPA never discloses the cost of CCS for baseload combined cycle units net of assumed tax credits, but it can be derived using the conversion EPA employs for CCS equipment -- \$89 per metric ton of CO₂ reduction converts to \$27 per MWh over 30 years. *Id.* at 39,932, JA____. EPA's expected tax credits produce \$87 per metric ton of captured carbon for gas units, enough only to offset the CCS equipment cost assuming the 80 percent capacity factor. *Id.* at 39,934, JA____. EPA says the remaining (unquantified) costs are reasonable, but does not explain why.

The 80 percent load factor assumption rests on a blinkered analysis. Utilities dispatch resources in economic order. Renewable resources, when available, have no running cost and dispatch first. Nuclear units, with relatively low incremental costs, dispatch next. The next best resource may be combined cycle gas or coal, depending on fuel prices. These generators cannot rationally be expected to achieve consistent overall capacity factors because they must turn down when demand falls. Further, the marginal costs for transporting and sequestering carbon may place combined cycle generators last in the dispatch line. Consideration of potential tax credits may not be realistic because the use of credits requires taxable

income and depends on the amount of carbon capture actually achieved. EPA concedes that carbon capture is “more challenging” in gas units because there is much less carbon in the flue stream. *Id.* at 39,925, JA____.

The full Section 45Q tax credit will not be available to utilities until the technology and infrastructure is established, tested, and put to use because the credit is calculated based on the amount of CO₂ captured and sequestered by the taxpayer. *See* 26 U.S.C. § 45Q(a). Utilities must begin planning for and implementing CCS before the tax credits are available, including contributing the capital to implement CCS. The full amount of the tax credit is contingent upon the utility achieving a 90 percent capture rate, which to date has never been achieved. Furthermore, the tax credits relied upon by the Rule may not even exist by the time utilities may qualify to receive them due to political uncertainty.

The more expensive it is to capture CO₂, or the less effective it is, the greater the risk that the revenue streams from the tax credits and the sale of electricity from affected generators will fail to cover even the CCS installation costs. Utilities will attempt to push the initial costs of implementing the CCS technology to consumers almost immediately, with only a hope of receiving some amount of offsetting tax credits in the future.

By forcing natural gas units to run at below-normal levels, EPA requires utilities to construct more of them to meet pressing demand and reliability

needs. That is simple logic, but EPA never addresses the cost of more units or the feasibility of meeting the increased construction requirements in time to keep the grid reliable. EPA effectively requires the addition of more, less-efficient, higher-emitting gas units as the “best system” of emissions reduction.

B. The Rule Does Not Sufficiently Address Tax and Utility Ratemaking Realities That Could Impede the Use Of Tax Credits As an Offset To the Cost Of Implementing CCS.

The Rule is arbitrary because it does not adequately address tax and electric utility ratemaking issues that may hinder utilities’ ability to utilize the tax credits that the EPA presumes will be received. Utilities that are in net operating loss (“NOL”) positions, for instance, cannot utilize tax credits to offset taxes because those utilities do not currently owe taxes. As an example, Entergy at year-end 2023 had \$3.6 billion in federal net operating loss carryforward deferred taxes. 2023 Entergy La. FERC Form 1, Note 3 to Financial Statements (available on FERC eLibrary). Worse, during the time that the utility maintains unused tax credits, the utility could include the deferred value of the credits in its rate base as an asset accumulated deferred income tax (“ADIT”) that earns a return payable to the utility from customers, as Entergy has done. *See La. Pub. Serv. Comm’n v. Sys. Energy Res., Inc.*, 183 F.E.R.C. ¶ 63,020, ¶¶ 447-49 (2023). Unless corrected by regulators, the costs will further increase the burden of the Rule on customers.

In response to this concern, the EPA contends that the Inflation Reduction Act enables “additional methods to monetize tax credits in the event the taxpayer does not have sufficient tax liability, such as through credit transfer.” CI0001, 89 Fed. Reg. at 39,881, JA____. Pursuant to the statute, the recipient of the tax credit is allowed to transfer it to any other taxpaying entity, even entities that are unrelated to the original recipient of the tax credit, in exchange for cash payments. 26 U.S.C. § 6418(a); 26 C.F.R. § 1.6418-1. But the Rule does not explain how utility customers, those that are most likely to pay for CCS implementation, are protected from the resulting cost if the utility transfers its tax credits. Nor does it estimate the extent to which the sale costs will have to be discounted, given that the utility cannot use the credits. Indeed, EPA never explains how future tax credits related to an uncertain carbon capture stream could be monetized at all.

EPA is not an expert in taxation, regulatory accounting, or electric utility ratemaking and it has acknowledged that it “does not implement the IRC section 45Q tax credit program.” CI0001, 89 Fed. Reg. at 39,872, JA____; *W. Va. v. EPA*, 597 U.S. 697, 729 (2022) (“Understanding and projecting system-wide . . . trends in areas such as electricity transmission, distribution, and storage requires technical and policy expertise *not* traditionally needed in EPA regulatory development.” (internal quotations omitted)). No deference should be provided to EPA’s conclusions regarding subject matters beyond its expertise. *Texas v. EPA*,

829 F.3d 405, 432 (5th Cir. 2016) (“[T]he level of deference owed to an agency’s conclusions is substantially diminished when the subject matter in question lies beyond the agency’s expertise.”).

FERC, on the other hand, is an expert in electric utility ratemaking and the opinions of its members should be considered. CI0736 at 13 (LPSC commenting on FERC’s expertise). FERC Commissioners recently issued letters describing the consequences of the EPA’s Rule. In an August 13, 2024 letter to certain members of Congress, FERC Commissioner Mark Christie explained the “catastrophic” effects that the EPA’s Rule would have on energy markets and the cost of electricity. Letter from FERC Commissioner Mark C. Christie, to Cathy Rodgers, Chair, Committee on Energy & Commerce, et al. (Aug. 13, 2024) (on file with FERC eLibrary in Docket No. AD23-9) (“Christie Letter”). Commissioner Christie explained:

[T]he EPA’s new power plant rule . . . will force the retirement of nearly all remaining coal generation plants and will prevent the construction of vitally needed new combined-cycle baseload gas generation. . . . **This loss of vitally needed dispatchable generation resources will be catastrophic.**

Id. at 2 (emphasis added).

When addressing how the Rule would “affect capacity and energy market prices,” Commissioner Christie stated: “When supply is decreasing and demand is increasing, prices rise. Econ 101. The same will apply in energy and

capacity markets.” *Id.* Thus, in addition to paying the cost of implementing CCS for the units that will not retire, ratepayers will incur a dramatic increase in the cost of their electricity due to the lack of supply that will result from the retirements of coal units and the reduced construction of baseload gas units.

The concerns of Commissioner Christie are well-founded. The realization of the tax credits needed to offset the cost of CCS is tied to the utilities’ ability to capture carbon. CI0001, 89 Fed. Reg. at 39,881, JA____ (“\$85/metric ton” if requirements are met). But the total amount received in tax credits is determined by the tons of carbon actually captured. If CCS is less effective than estimated, the tax credits received will be lower, and the net cost will be higher.

All five FERC Commissioners agree that there are currently no “generators participating in the FERC-jurisdictional markets utiliz[ing] carbon capture technology at a sustained capture rate of 90 percent.” Letters from FERC Commissioners, to Cathy Rodgers, Chair, Committee on Energy & Commerce, et al. (Aug. 13, 2024) (on file with FERC eLibrary in Docket No. AD23-9). Commissioner Christie explained that assuming a 90 percent carbon capture rate, and thereby maximizing the benefits of the tax credits as EPA assumes, is “unrealistic.” He said:

The overwhelming weight of the expert evidence indicates that a 90% carbon capture standard applied to generation units fueled by gas or coal **is neither technically nor commercially feasible**. I am not aware of any generating

units that are commercially successful in energy or capacity markets today that have met such an **unrealistic standard**.

Christie Letter at 2 (emphasis added); *see also* Commissioner See Letter 1-2 (Aug. 13, 2024).

Relying on tax credits that are tied to an “unrealistic” carbon capture standard to impose an industry-wide mandate is not the product of reasoned decision-making. Expert opinions, such as those of FERC Commissioners, regarding the cost of implementing the Rule and the Rule’s ratemaking and reliability implications should be considered over the non-expert speculations of the EPA.

C. Tax Credits Only Transfer the Cost of Implementing CCS; They Do Not Eliminate the Cost.

Contrary to the Rule’s assertions, even if the cost of implementing CCS is partially offset by tax credits, the billions of dollars in costs do not vanish. Instead, those costs are transferred from the utilities and their ratepayers to U.S. taxpayers. The excessive costs still exist, and EPA was required to address them fully in the Rule.

EPA does not dispute that the use of tax credits to subsidize CCS only shifts the cost of implementing the Rule from ratepayers to taxpayers. EPA instead argues that the Act only requires it to analyze the cost to the “regulated source” of implementing CCS. In its response to applications to stay its Rule filed with the

Supreme Court, the EPA contends that “[t]he statutory text [of Section 111] . . . focuses on the cost to the regulated source of ‘achie[ving]’ the reduction ‘through the application’ of the best system, not on the loss of revenue to the Treasury that the Inflation Reduction Act tax credits may entail.” Response of Federal Respondents in Opposition to Applications for Stay, at 47, Sup. Ct. Docket No. 24A95 et al. (Aug. 19, 2024); *see also* CI0001, 89 Fed. Reg. at 39,881, JA____. EPA’s argument distorts the language of Section 111.

Contrary to the EPA’s claims, Section 111 of the Act requires the “best system of emission reduction” chosen by the EPA to take “into account **the cost** of achieving such reduction and any nonair quality health and environmental impact and energy requirements.” 42 U.S.C. § 7411 (emphasis added). That language is intended to be interpreted broadly and does not require a narrow “focus on the cost to the regulated source” as EPA claims. *Id.* “[T]he cost” of implementing CCS includes, but is not limited to, costs that may be incurred by ratepayers, utilities, and taxpayers.

The legislative history of Section 111 confirms that Congress intended for the term “costs” to be interpreted broadly. This court explained the history and broad scope of the “cost” factor in *Sierra Club v. Costle*, 657 F.2d 298 (D.C. Cir. 1981). It said:

[W]hen section 111 was amended in 1977 Congress did not narrow EPA’s discretion to perform broad based

analysis of potential impacts of a standard, even though Congress was aware that previous administrative and judicial interpretations of the former version of section 111 permitted the assessment of the long term costs to industry, consumers, and the environment. . . . Largely as a result of *Portland Cement*, the “cost” considerations of former section 111 were specifically supplemented by Congress in the 1977 Amendments to cover considerations of nonair quality health and environmental impacts and energy requirements.

Id. at 331. EPA’s argument is belied by the statutory language of Section 111, its legislative history, and this court’s precedent.

D. The Rule Is Internally Inconsistent for Rejecting One Potential BSER for the Same Reason That It Approves Another.

Beyond requiring reliance on higher-emitting, lower-efficiency gas generators, the Rule is arbitrary because it approves one BSER for the same reason that it rejects another. “EPA’s action must . . . be consistent; an internally inconsistent analysis is arbitrary and capricious” and must be rejected. *Nat’l Parks Conservation Ass’n v. EPA*, 788 F.3d 1134, 1141 (9th Cir. 2015).

When determining the BSER for long-term coal units, the EPA considered whether it should approve a system for “partial-CCS at lower capture rates (*e.g.*, 30 percent).” CI0001, 89 Fed. Reg. at 39,846, JA____. The Final Rule rejects that system in favor of 90 percent CCS, finding that partial-CCS “achieves substantially fewer unit-level reductions at greater cost . . .” *Id.* The EPA reasoned that “the IRC section 45Q tax credit **may not be available to defray the costs of**

partial CCS.” *Id.* (emphasis added). But the section 45Q tax credit may not be available to defray the costs of CCS at 90 percent, but the Rule still approves that system. The Rule’s internal inconsistency is arbitrary.

E. Cleco’s Recent Experience Confirms That EPA Was Arbitrary For Failing To Consider the True Cost Of Implementing CCS Without Speculative Offsetting Tax Credits.

Cleco Power (“Cleco”), a Louisiana utility, recently abandoned a CCS project relied on in the Rule and was not able to offset the cost with tax credits. In April 2022, Cleco announced that it would study implementation of CCS. The program was named “Project Diamond Vault.” CI0001, 89 Fed. Reg. at 39,851, JA____; *see also* CI0631 (Comments of Alliance for Affordable Energy) (discussing some unintended negative consequences of Project Diamond Vault). Information provided by Cleco at the start of the project explained that the company expected the project “to reduce the carbon output of Madison Unit 3 by approximately 95%” by capturing and storing CO₂ “permanently in deep geological formations.” Cleco Corporate Holdings, LLC 2022 SEC Form 10K, at 32 (Mar. 8, 2023), <https://www.sec.gov/ix?doc=/Archives/edgar/data/18672/000108981923000003/cn1-20221231.htm>. Cleco estimated the project would cost \$1.1 - \$1.4 billion, but that “funding through 45Q tax credits makes the project financially viable.” *Id.*; CI0001, 89 Fed. Reg. at 39,851, JA____.

In its August 2024 SEC Form 10Q report, Cleco announced that it was discontinuing its engineering and design (“FEED”) study for Project Diamond Vault because of economic and financial concerns. Cleco Corporate Holdings, LLC SEC Form 10Q, at 51 (Aug. 18, 2024), <https://www.sec.gov/ix?doc=/Archives/edgar/data/18672/000108981924000026/cnl-20240630.htm> (“August 2024 Cleco 10Q”).

The Company explained:

Due to increases in the estimated investment required as well as the current economic and financing environment, Cleco Power’s management decided to discontinue the current FEED study and transition to evaluate other potential carbon capture sequestration technologies or alternatives to decarbonize Madison Unit 3 As of June 30, 2024, Cleco Power had incurred a total of \$16.7 million, of which Cleco Power has received \$4.2 million and expects to receive an additional \$1.7 million from the congressional appropriation to offset these costs. The remaining \$10.8 million of previously deferred project costs were expensed as of June 30, 2024, due to the uncertainty of recoverability. . . .

Id.

Cleco’s failed experiment with CCS proves that the Rule’s assumptions are unreliable. Indeed, EPA relied on Project Diamond Vault as support for the Rule. CI0001, 89 Fed. Reg. at 39,851, JA____. EPA quoted Cleco’s premature assumption that “45Q tax credits [would make] the project financially viable.” *Id.* But despite those predictions, Cleco only received \$4.2 million of tax credits compared to \$16.7 million of sunk costs at the time the project was discontinued for economic and

financial concerns. August 2024 Cleco 10Q at 51. After factoring in an additional \$1.7 million of tax credits waiting to be received, Cleco expensed \$10.8 million of project costs that represented approximately two-thirds of the total cost of the project. The write-off for financial reporting may not prevent CLECO from seeking rate relief for the cost, however. *Id.* The Rule’s conclusion that a similar CCS system be implemented nationwide is contradicted by the results of the same Project Diamond Vault example that the EPA relies upon as evidence in support of its Rule.

The cost effects of the Rule are particularly concerning to regulators and customers in Louisiana and similarly situated states, which depend on efficient natural gas generators to meet load requirements and have suffered the devastating impacts of storm damage. The Rule effectively requires combined cycle generators to operate at inefficient levels, requiring more generators to back up renewables and assure reliability. CI0001, 89 Fed. Reg. at 39,937, JA____ (“The EPA expects there to be considerable interest in building intermediate load and low load combustion turbines to meet demand.”). The Rule forces the use of less-efficient resources.

Louisiana has been decimated repeatedly by named hurricanes in the last two decades: Katrina (2005), Rita (2005), Gustav (2008), Ike (2008), Isaac (2012), Laura (2020), Delta (2020), Zeta (2020). The storms saddled customers with \$6 billion in damage repair costs. The Tennessee Valley Authority (“TVA”) service area has experienced Winter Storms Uri (2021) and Elliott (2022), as a result of

which TVA has had to invest approximately \$250 million in 2023 and 2024 alone to improve the resiliency of its generating facilities. TVA has added 1400 MW of new, fast start, natural gas-fired generation to its Paradise and Colbert plants, and plans to invest a further \$15 billion over the next three years to meet growing electricity demand in its service area. These sunk costs exacerbate the cost impact of the Rule.

III. THE RULE JEOPARDIZES THE RELIABILITY OF THE ELECTRIC GRID.

The Rule undermines the reliability of the electric grid by forcing the early retirement of coal plants and limiting and increasing the costs of generation of electricity from baseload gas plants. Section 111 of the Act requires the EPA to determine “the degree of emission limitation achievable through the application of the best system of emission reduction” that “has been adequately demonstrated.” 42 U.S.C. § 7411(a)(1). The Rule’s imposition of 90 percent carbon capture and sequestration as the BSER fails to meet this statutory standard.

The Rule requires, among other things, (1) existing fossil fuel-fired steam generating electric generating units which will operate on or after January 1, 2039, must achieve 90 percent CO₂ capture through the use of carbon capture and sequestration technology by January 1, 2032; and (2) new baseload turbines, those with a capacity factor greater than 40 percent, are subject to a two-phase approach which also requires meeting the 90 percent capture of CO₂ by January 1, 2032.

CI0001, 89 Fed. Reg. at 39,838, 39,802, JA ____, _____. The Rule's requirements are not achievable because CCS has not been adequately demonstrated.

In combination with the Rule's cost impacts, the implementation of its requirements will undermine the reliability of the electric grid. The EPA's contrary contentions fail the basic requirement of reasoned decision making: "Not only must an agency's decreed result be within the scope of its lawful authority, but the process by which it reaches that result must be logical and rational." *Michigan v. EPA*, 576 U.S. 743, 750 (2015) (quoting *Allentown Mack Sales & Serv. v. NLRB*, 522 U.S. 359, 374 (1998)). Intervenors review two of the EPA's many failures to adhere to reasoned decision-making in addressing the impacts of the Rule on the reliability of the national electric grid: (1) EPA's failure to address adequately the reliability concerns raised in its rulemaking process, and (2) EPA's efforts to downplay that failure in its flawed Regulatory Impact Analysis ("RIA").

The Rule impairs electric grid reliability by forcing the industry to rush through efforts to implement a carbon capture and sequestration technology that remains both technically and economically unproven. Otherwise, utilities must build more units to generate reduced amounts of electricity. The Rule needlessly compounds existing reliability issues with its carbon capture mandates, and ignores those existing reliability concerns almost completely. Imposing a new regulatory framework that forces generator retirements while mandating compliance with an

inadequately proven technology is a profoundly counterproductive approach to decarbonizing the electric power industry. “In short, hope is not an acceptable strategy.” CI0763 (Joint Comments of Electric Reliability Council of Texas, *et al.*) at 2, JA____.

The Rule’s impairment of grid reliability has been documented by RTOs -- “regulated organizations within FERC’s jurisdiction that manage bulk energy transmission operations, ensure equitable and reliable energy transmission, balance energy distribution among market participants, and oversee the markets where energy transactions take place” (*Assoc. Elec. Coop., Inc. v. FERC*, 110 F.4th 1079, 1082 (8th Cir. 2024)) – and by the North American Electric Reliability Corporation (“NERC”), the Electric Reliability Organization responsible for the establishment and enforcement of reliability standards that provide for an adequate level of reliability for the bulk power system. 16 U.S.C. § 824o. Many of the RTOs raised concerns regarding reliability in comments on EPA’s Proposed Rule. *See, e.g.*, CI0673 (Joint Comments of Electric Reliability Council of Texas, *et al.*) at 9-10, JA____-____; CI0623 (Comments of Midcontinent Independent System Operator) at 2-5, JA____-____ (“EPA’s Proposed Rule . . . likely will undermine the mission of providing reliable power to the communities and consumers that MISO and others serve”).

The Rule makes relatively minor adjustments to the Proposed Rule, but fails to address the reliability issues raised by the RTOs and others. For instance, PJM, the RTO serving all or parts of 13 states and the District of Columbia, noted that the Rule imposes stringent requirements on new gas and existing coal units that operate as baseload units and “provide a critical reliability role.” *PJM Statement on the Newly Issued EPA Greenhouse Gas and Related Regulations* (May 8, 2024), available at: <https://www.pjm.com/-/media/about-pjm/newsroom/2024-releases/20240508-pjm-statement-on-the-newly-issued-epa-greenhouse-gas-and-related-regulations.ashx>. PJM noted that with the increase in demand due to data centers, electric vehicles, and electric heating, future demand “cannot be met simply through renewables given their intermittent nature.” *Id.* PJM also noted that the Rule may “drive premature retirement of coal units that provide essential reliability services and dissuade new gas resources from coming online.” *Id.*

The Southwest Power Pool (“SPP”), the RTO serving 14 member states remains concerned with the Rule’s impact on its “region’s ability to maintain resource and ensure reliability in the SPP region.” *SPP Statement on the Recent EPA Greenhouse Gas Emissions Rule* (May 20, 2024), available at <https://www.spp.org/documents/71677/spp%20statement%20on%20epa%20final%20ghg%20rule%20202405020.pdf>. Specifically, SPP is concerned that:

limited technological and infrastructure availability and the compliance time frame will have deleterious impacts

including the retirement of, or the decision not to build, thousands of MWs of baseload thermal generation.

Id. at 2.

SPP emphasizes that these concerns are not about a “hypothetical resource adequacy scenario in the future” but relate to resource adequacy issues that already exist. SPP’s studies indicate that by 2029, “as much as a 50% winter season Planning Reserve Margin (“PRM”) could be necessary to maintain a one-day-in-ten-years LOLE.” *Id.* That means that utilities will need many more generators than are currently required to meet demand. This does not even account for the Rule’s 2032 compliance deadline and generation that may retire and not be replaced due to the Rule.

EPA attempts to mask the catastrophic effect of its Rule on bulk electric system reliability in its RIA. CI8913, JA____. The Integrated Planning Model on which the RIA relies is fundamentally flawed. EPA describes its IPM as “a multi-regional, dynamic, deterministic linear programming model of the contiguous U.S. electric power sector.” CI8913 at 3-7, JA____.

The shortcoming of deterministic models like the IPM in predicting the impact of the Rule on the reliability of the bulk electric systems is that they do not account for likely variables in weather, generation outages, and similar factors. That level of insight as to future outcomes requires a probabilistic modeling analysis, which EPA did not undertake in connection with its Rule. Several commenters,

including TVPPA, highlighted these limitations and analytical flaws in the EPA's IPM. *See, e.g.*, CI0770 at 26-28, JA____ (NRECA Comments); CI0710 at 97-101 (Power Generators Air Coalition Comments) and Attachment M (Marchetti Analysis); JA____, ____; CI0792 at 21-24, JA____ (TVPPA Comments).

EPA contends that the Rule addresses reliability issues, emphasizing its restructuring of the subcategories for coal-fired steam generating units, not finalizing the imminent or near term subcategory from the Proposed Rule, extending the compliance timeline for installing CCS by a mere two years, and not finalizing the 30 percent hydrogen co-firing BSER for the intermediate subcategory for new combustion turbines. CI0001, 89 Fed. Reg. at 40,012, JA____. EPA asserts that its modifications of the Proposed Rule provide “more lead time for CCS installation-related compliance” and that the “structural adjustments and compliance flexibilities . . . are adequate to ensure that the implementation” of the Rule “does not interfere with systems operators’ ability to ensure electric reliability” CI0001, 89 Fed. Reg. at 40,012, 40,014, JA____, _____. These assertions ignore the realities confronting those responsible for providing reliable supplies of on-demand electric energy.

The bulk electric system is changing rapidly. An increase in reliance on intermittent, variable output, renewable resources has led to the retirement of baseload generation from coal and gas-fired plants. Baseload MW retirements will

increase year-over-year through 2040. For example, EPA estimates that the Rule will result in the additional retirement of 5,000 MW of coal by 2030, an incremental 21,000 MW by 2035, and an incremental 14,000 MW by 2040 relative to baseline. CI8913 at 3-28 (EPA Regulatory Impact Analysis), JA____. EPA’s modeling acknowledges that to achieve “efficient compliance” with the Rule, many generators will retire instead of installing CCS. *Id.* At least one commenter noted that 39.75 percent (66 out of 166) of the coal plant retirements that EPA estimated would occur, before factoring in the Final Rule, were erroneous. CI0770 at 31-32, JA____ (NRECA Comments). Due to that error, more coal units will be in service when the Rule is implemented than EPA predicted, thus substantially increasing the cost and reliability impacts of the implementation of the Rule above what EPA predicted.

These flaws in its IPM and Regulatory Impact Analysis underscore the limitations of EPA’s expertise, even as EPA itself acknowledges that its “central mission is to protect human health and the environment” and it “does not have direct authority or responsibility to ensure electric reliability.” CI0001, 89 Fed. Reg. at 40,013, JA____. Given that “grid reliability is not a subject of the Clean Air Act” (*Del. Dep’t of Natural Res. & Env’tl. Control v. EPA*, 785 F.3d 1, 18 (D.C. Cir. 2015)), it would have been reasonable both to seek and to follow expert guidance concerning how to fulfill its statutory obligation to take “into account the cost of achieving such reduction and any energy requirements)” in selecting the BSER

under 42 U.S.C. § 7411(a)(1). The misdirection of EPA's analyses renders its Rule arbitrary and capricious.

The retirement and replacement of generation facilities involves the careful consideration of many issues beyond emissions levels. The IPM does not appear to address reliability services of the grid including fuel assurance, black start capability, dispatchability, and flexibility. EPA's "national assessment" of impacts to the electric grid ignores important local reliability considerations.

Significant shifts in generation often have grid stability impacts. Some of this can be mitigated through transmission upgrades, but such upgrades take time. Also, local generation is needed to balance electric flow from transmission lines. The planning, permitting, procuring, and building of a new 500 kV transmission line typically takes eight years, and 165 kV lines take about five years. Building any new infrastructure requires several years for planning, permitting, and construction. Thus, under a reasonable set of timing assumptions, the work bringing on-line any new facilities or retrofitting current facilities to meet the timelines in the Rule should have already begun.

The permitting process alone can take years. For instance, as EPA notes in the Rule, the permitting process for intrastate CO₂ pipelines involves a number of private, local, state, tribal, and federal agencies and the permitting process for interstate pipelines may take even longer. CI0001, 89 Fed. Reg. 39,858, JA____.

This process, according to EPA, will take approximately two and a half years. *Id.* at 39,860, JA _____. However, this estimate does not account for any significant delays or legal challenges. If a Class VI permit is needed, the timeline will likely be substantially longer.

The capital-intensive investments required to adapt to the Rule's requirements for CCS infrastructure and technology appear likely to induce many units to retire rather than invest to comply with the Rule. This will exacerbate reliability concerns that are already emerging as the Nation's power supply advances toward decarbonization. As then-FERC Commission James Danly observed in his May 23, 2023, testimony before the Senate Committee on Energy and Natural Resources (*Written Testimony of James P. Danly, Commissioner, Federal Energy Regulatory Commission Before the Committee on Energy & Natural Resources United States Senate* (May 4, 2023), available at: <https://www.energy.senate.gov/services/files/0A896B12-2895-4F68-A367-74009F2975C4>:

As an engineering matter, there is no substitute for reliable, dispatchable generation. Intermittent renewable resources like wind and solar are simply incapable, by themselves, of ensuring the stability of the bulk electric system. As the wholesale markets' prices are distorted by subsidies, the generation assets with the attributes required for system stability will retire and system stability will be imperiled. Given these market failures, there will be, in time, a catastrophic reliability event.

Id. at 2.

IV. THE RULE INTRUDES UPON THE RIGHTS OF STATES TO CHOOSE THEIR MIX OF GENERATION RESOURCES.

The Rule intrudes on the traditional authority of individual States to determine their mix of generating resources. It imposes strict requirements on coal and natural gas-fired generating units that make the continued use of those generators uneconomic. In many states, like Louisiana, utilities must show that a project is a reasonable choice to meet consumer demand. Those proceedings take time, and the difficulty of forecasting the cost of CCS for all new facilities will make the process more complex and, potentially, litigious.

The tremendous cost increases that will result from the Rule will make it uneconomical to build new natural gas fired generation, impede approval of those projects by state public service commissions and result in the early retirement of coal units that are needed for grid reliability. Christie Letter at 2 (“[T]he EPA’s new power plant rule . . . will force the retirement of nearly all remaining coal generation plants and will prevent the construction of vitally needed new combined-cycle baseload gas generation.”). By forcing the retirements of certain generators and economically blocking the construction of new units, the Rule intrudes upon the States’ rights to choose their mix of generation resources.

The choice of generating resources and fuel mix are decisions within the States’ authority and jurisdiction. *Pac. Gas & Elec. Co. v. State Energy Res. Conservation & Dev.*, 461 U.S. 190, 212 (1983). States are the most knowledgeable

of the needs of their jurisdictional ratepayers and are best equipped to make decisions regarding the optimal mix of generation resources needed to reliably serve load.

Section 215(i)(3) of the Federal Power Act reserves jurisdiction over the “safety, adequacy, and reliability of electric service” to the states. 16 U.S.C. § 824o(i)(3). The United States Supreme Court acknowledged states’ “traditional authority” in *Pacific Gas & Electric Co. v. State Energy Resources Conservation & Development*, 461 U.S. 190, 212 (1983), where it found that “States exercise their traditional authority over the need for additional generating capacity, the type of generating facilities to be licensed, land use, ratemaking, and the like.” *Id.*

FERC has also recognized the states’ authority over choosing their own generating resources on numerous occasions. In September 2017, then FERC Chairman Neil Chatterjee reaffirmed FERC’s commitment to maintaining the state’s traditional authority to make decisions regarding generation mix. *Powering America: Defining Reliability in a Transforming Electricity Industry Before the Subcomm. on Energy of the H. Comm. on Energy and Commerce*, 115th Cong. 38 (2017), available at <https://www.govinfo.gov/content/pkg/CHRG-115hhr27275/pdf/CHRG-115hhr27275.pdf>. Although then-Chairman Chatterjee stated that FERC should “weigh in” on generation resource decisions in some instances, he acknowledged that those decisions should ultimately remain with the states. *Id.* He stated:

Certainly, [a generation decision] is within the State's purview, and I believe in States' rights. And States, **it is their prerogative to determine their sources of generation and their generation mix.**

Id. at 34 (emphasis added).

The LPSC has plenary regulatory authority under Louisiana law over such areas as power generating facilities and their economic feasibility, the types of generating facilities to be licensed and constructed in the state, service to Louisiana consumers, and retail sales of electricity. “The Commission is an expert within its own specialized field.” *Dixie Elec. Membership Corp. v. La. Pub. Serv. Comm’n*, 441 So. 2d 1208, 1211 (La. 1983). These areas are within the specialized expertise of the LPSC and areas in which EPA lacks expertise and delegated authority. *W. Va. v. EPA*, 597 U.S. 697, 729 (2022) (“Understanding and projecting system-wide . . . trends in areas such as electricity transmission, distribution, and storage requires technical and policy expertise *not* traditionally needed in EPA regulatory development.” (internal quotations omitted)).

EPA lacks the authority to dictate a state's choice in generation mix. The Rule should be vacated to prevent the EPA's intrusion upon States' rights.

CONCLUSION

The Court should vacate EPA's Rule.

Respectfully submitted,

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RULE 32(a)(7)(b) CERTIFICATE OF COMPLIANCE

I hereby certify that this brief complies with Rule 32(a)(7)(b). It contains 8,951 words and has been prepared using Microsoft Word in 14-point Times New Roman font.

/s/ Justin A. Swaim

Justin A. Swaim

CERTIFICATE

I hereby certify that copies of the above and foregoing “Brief Supporting Petitioners on Behalf of Intervenors, the Louisiana Public Service Commission and the Tennessee Valley Public Power Association, Inc.” have been served upon all counsel of record through the Court’s CM/ECF system this 6th day of September, 2024.

/s/ Justin A. Swaim

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